PLEASANT GROVE CREEK

The literature review for Pleasant Grove Creek did not result in any information related to:

- Existing Water Quality Data
- Water Temperature Data
- Benthic Macroinvertebrate Data
- Physical Habitat Data
- Fishery Resource Data
- Fish Passage or Screening Data

I reviewed all of the pertinent environmental documents produced by the cities of Rocklin and Roseville, talked with appropriate staff in the two cities, and searched the fisheries files at the California Department of Fish and Game's Region 2 office. Since Pleasant Grove Creek is currently intermittent, environmental documents focus on wetlands, vernal pools, and riparian issues, but not on water quality, benthic macroinvertebrates, or fishery resources. In fact, CDFG only has an empty file folder for Pleasant Grove Creek. However, I did visit all of the accessible road crossings over the various channels. During the stream videography project in March 2003, we did fly the main channel of Pleasant Grove Creek. Therefore, my assessment of this stream's potential to support anadromous fish is based on my limited road crossing observations and my flight observations. *[This assessment is basically repeated in the Assessment Report prepared for Placer County]*.

A. Water Quality

Assessment: Observations of water in the channel during the helicopter flight showed what appeared to be some minor turbidity and color. I suspect that the color is generated from the extensive wetlands in the upper portion of the watershed. At road crossings in the uppermost portion of the watershed, the stream channel is quite small, but water quality appeared good, although no information on metals or pesticide concentrations are available.

B. Water Temperature

Assessment: Although no data is available, my belief is that water temperatures, if perennial flow were to become the norm, would be unsuitable in summer for juvenile salmonid rearing in the portion of the watershed downstream of a point somewhere between Stanford Ranch Road and Wyckford Drive in Rocklin. The channel becomes shaded in a greenbelt and it is possible that water temperatures could support summer rearing of juvenile steelhead. In areas downstream, water temperatures would be unsuitable for salmonids. However, once the new City of Roseville wastewater treatment facility begins discharging water to the channel near Phillips Road, downstream temperature conditions could change things considerably.

C. Benthic Macroinvertebrates

Assessment: In the event the channel did become perennial at some future date, I speculate that the substrate would be composed of fine particles to coarse sand. This substrate would support a

low diversity and numbers of organisms that would be suitable as a food source for salmonids. In the watershed upstream of Stanford Ranch Road, there is suitable substrate to support a more diverse invertebrate community and the sediment levels are lower than in downstream areas.

D. Physical Habitat

Assessment: This stream channel, in general, is very low gradient and the surrounding soils are mostly fine textured. Given these constraints, I do not believe that a significant majority of this stream could ever possess the physical characteristics to support salmonid species. However, there is a small percentage of the channel in the upper headwaters that may be able to support a small population of steelhead. I do not believe this stream could support chinook salmon. The size of the stream at the point where suitable physical conditions might develop is just too small to support chinook. In this upper portion of the watershed., stream gradient increases, which results in gravel and cobble beginning to appear as the channel substrate. The nature of the sediment changes from decomposed granite in downstream areas to a much finer soil/organic matter texture. The vast majority of the channel has a riparian zone in very poor condition and miles of eroding banks. Sediment load deposited in the channel is staggering in extent and volume.

Fishery Resources

Assessment: Based on the location, gradient, soils, and other factors associated with this channel, I believe that this stream has very low potential as an anadromous fish stream. The current conditions, and I believe most likely future conditions in the channel do not meet most, if any, of the requirements necessary to support anadromous fish. Although, conditions might change sufficiently in the future, to allow suitable habitat and flow volumes to support a very small population of steelhead in the uppermost portion of the watershed.

Fish Passage or Screening

Assessment: There are numerous diversions, a multitude of beaver dams, and man-made small earthen dams upstream of Highway 65. All of these potential barriers would need to be evaluated in the context of the potential steelhead habitat in the upper watershed. Not much bang for the buck in this stream channel.